

Serial No.: 10/751,009
Docket No. SHE0074.00

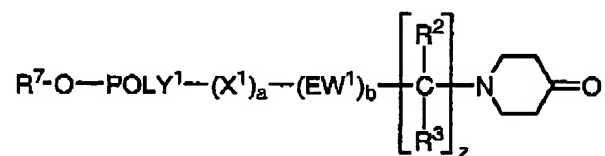
In the Claims:

Please cancel claims 1-34, 54-169, 183, 185 and 186 without prejudice. In addition, please amend claims 35, 39, 53, 171-182 and 184, and add claims 187 and 188 as indicated below.

Claims 1-34 (Canceled).

35. (Currently amended) A polymeric reagent comprising a water-soluble polymer segment and a functional group, wherein the functional group is part of a cyclic structure and further wherein the cyclic structure is attached to the water-soluble polymer segment through either a direct covalent bond or through one or more atoms, wherein the functional group is selected from the group consisting of ketone, ketone hydrate, thione, monothiohydrate, dithiohydrate, hemiketal, monothiohemiketal, dithiohemiketal, ketal, and dithioketal, and further wherein the polymeric reagent lacks a cyclic dienone.

36. (Original) The polymeric reagent of claim 35, comprising the following structure:



wherein:

POLY¹ is a water-soluble polymer segment having a terminus defined as -O-R⁷;

(a) is either zero or one;

(b) is either zero or one;

X¹, when present, is a spacer moiety;

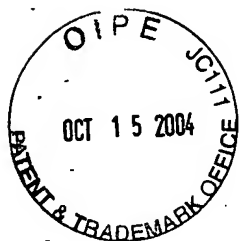
EW¹, when present, is an electron-withdrawing group;

(z) is zero or a positive integer;

each occurrence of R², when present, is independently H or an organic radical;

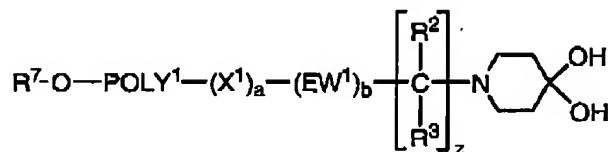
each occurrence R³, when present, is independently H or an organic radical; and

R⁷ is H or an organic radical.



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37. (Original) The polymeric reagent of claim 35, comprising the following structure:



wherein:

POLY¹ is a water-soluble polymer segment having a terminus defined as -O-R⁷;

(a) is either zero or one;

(b) is either zero or one;

X¹, when present, is a spacer moiety;

EW¹, when present, is an electron-withdrawing group;

(z) is zero or a positive an integer;

each occurrence of R², when present, is independently H or an organic radical;

each occurrence R³, when present, is independently H or an organic radical; and

R⁷ is H or an organic radical.

38. (Original) The polymeric reagent of claims 36 or 37, wherein the water-soluble polymer segment ("POLY") is a poly(ethylene glycol).

39. (Currently Amended) The polymeric reagent of claim ~~35~~ 38, wherein the poly(ethylene glycol) is -CH₂CH₂-(OCH₂CH₂)_m-OCH₂CH₂-, wherein (m) is from about 3 to about 3,000.

40. (Original) The polymeric reagent of claim 38, wherein the poly(ethylene glycol) is branched.

41. (Original) The polymeric reagent of claims 36 or 37, wherein R⁷ is a nonaromatic organic radical comprising nine or less carbon atoms.

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42. (Original) The polymeric reagent of claims 36 or 37, wherein R^7 is H or methyl.

43. (Original) The polymeric reagent of claim 38, wherein the poly(ethylene glycol) has a nominal average molecular weight of from about 2,500 Daltons to about 100,000 Daltons.

44. (Original) The polymeric reagent of claim 43, wherein the poly(ethylene glycol) has a nominal average molecular weight of from about 4,900 Daltons to about 40,000 Daltons.

45. (Original) The polymeric reagent of claim 44, wherein the poly(ethylene glycol) has a nominal average molecular weight of from about 9,900 Daltons to about 25,000 Daltons.

46. (Original) The polymeric reagent of claim 35, wherein the functional group is selected from the group consisting of thione, monothiohydrate, dithiohydrate, monothiohemiketal, dithiohemiketal, and dithioketal.

47. (Original) The polymeric reagent of claim 35, lacking halogen atoms.

48. (Original) The polymeric reagent of claims 36 or 37, lacking an aromatic moiety.

49. (Original) The polymeric reagent of claims 36 or 37, lacking an enone.

50. (Original) The polymeric reagent of claims 36 or 37, wherein (z) is zero, (b) is one, and EW^1 is selected from the group consisting of -O-, -NH-, -NHC(O)-, -C(O)NH-, -OC(O)-, -OC(O)-, -OC(O)-NH-, -NH-OC(O)-, -C(O)-, -C(S)-, and -C(OR)H-, wherein OR is an alkoxy or hydroxy substituent.

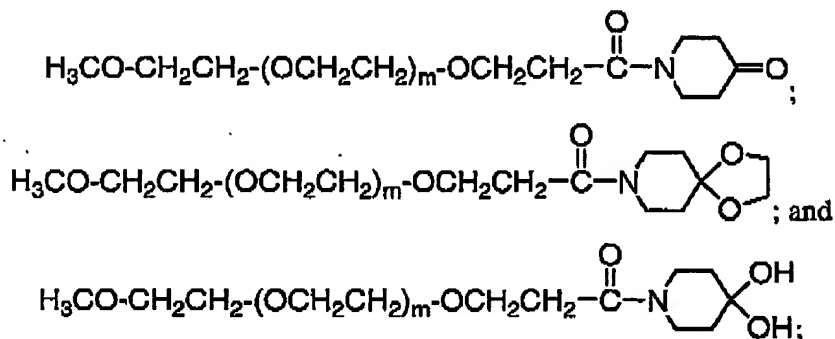
51. (Original) The polymeric reagent of claim 50, wherein EW^1 is -C(O)-.

52. (Original) The polymeric reagent of claim 35, wherein the cyclic structure is selected from the group consisting of piperidinyl, cyclohexyl, cyclopentyl, bicyclo[2,2,1]heptanyl, bicyclo[2,2,1]hexanyl, bicyclo[3,2,1]octanyl, bicyclo[3,1,1]heptanyl,

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bicyclo[3,3,1]nonanyl, cyclobutyl, cycloheptyl, cyclooctyl, oxa and aza forms thereof, and dioxo and diaza forms of any of the foregoing.

53. (Currently Amended) The polymeric reagent of claim 35, selected from the group consisting of;

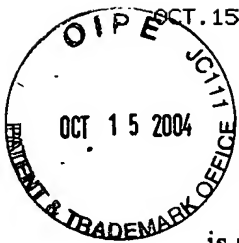


wherein (m) is from about 3 to about 3000, (a) is zero or one, (e) is zero or one, X^1 is a spacer moiety when present, and X^3 is a spacer moiety when present.

Claims 54-169 (Canceled).

170. A method for making a polymer-active agent conjugate comprising contacting, under conjugation conditions, an active agent with a polymeric reagent comprised of a water-soluble polymer segment attached, either directly or through one or more atoms, to a functional group, wherein the functional group is selected from the group consisting of ketone, ketone hydrate, thione, monothiohydrate, dithiohydrate, hemiketal, monothiohemiketal, dithiohemiketal, ketal, and dithioketal.

171. (Currently Amended) The method of claim 170, wherein the polymeric reagent is encompassed by ~~claim one of claims 1, 14, 35, 54, 75, or 110.~~



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172. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a ketone.

173. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a ketone hydrate.

174. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a hemiketal.

175. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a ketal.

176. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a thione.

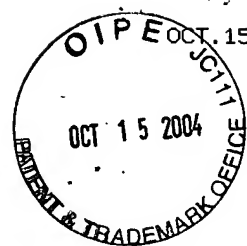
177. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a monothiohydrate.

178. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a dithiohydrate.

179. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a monothiohemiketal,

180. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a dithiohemiketal.

181. (Currently Amended) The method of claim ~~171~~ 170, wherein the functional group is a dithioketal.



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182. (Currently Amended) The method of claim ~~171~~ 170, wherein the active agent is a polypeptide.

183. (Canceled)

184. (Currently Amended) The method of claim ~~171~~ 170, wherein the active agent is not a polypeptide.

185. (Canceled).

186. (Canceled).

187. (New) A conjugate prepared according to the method of claim 170.

188. (New) A pharmaceutical preparation comprising the conjugate of claim 187 and a pharmaceutically acceptable excipient.

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